

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/568,337
Source: JFwP
Date Processed by STIC: 2/23/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 02/23/2006

PATENT APPLICATION: US/10/568,337

TIME: 08:02:48

Input Set : E:\61312.us.sequences.ST25.txt

Output Set: N:\CRF4\02232006\J568337.raw

3 <110> APPLICANT: Windisch, Jorg
 4 Schoergendorfer, Kurt
 5 Palma, Norbert
 6 Knauseder, Franz
 7 Boehling, Hans
 9 <120> TITLE OF INVENTION: Expression vectors, transformed host cells and fermentation
 10 process for the production of recombinant polypeptides
 12 <130> FILE REFERENCE: BP/G-33314 LNG 61312.US
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/568,337
C--> 14 <141> CURRENT FILING DATE: 2006-02-13
 14 <150> PRIOR APPLICATION NUMBER: PCT/EP2004/009067
 15 <151> PRIOR FILING DATE: 2004-08-12
 17 <150> PRIOR APPLICATION NUMBER: US 60/494,914
 18 <151> PRIOR FILING DATE: 2003-08-13
 20 <160> NUMBER OF SEQ ID NOS: 19
 22 <170> SOFTWARE: PatentIn version 3.3
 24 <210> SEQ ID NO: 1
 25 <211> LENGTH: 495
 26 <212> TYPE: DNA
 27 <213> ORGANISM: Artificial
 29 <220> FEATURE:
 30 <223> OTHER INFORMATION: DNA encoding human interferon alpha 2B with altered codon

usage

32 <400> SEQUENCE: 1		
33 tgcgatctgc cgaaaccca cagcctgggt agccggcgaa ctttgatgct tctggcacag	60	
35 atgcggcgaa tctctctttt ctctgctta aaggatcgac atgacttcgg tttcccgca	120	
37 gaggagttcg gtaaccagt caaaaaggct gaaaccatcc cggtattgca tgagatgatc	180	
39 cagcagatct tcaacctgtt cagcactaag gactttctg ctgcttggga tgagaccctg	240	
41 cttgacaaat tctacactga actgtaccag cagctgaacg acctggaagc ctgcgtgatc	300	
43 cagggtgtgg gtgtgactga gactccgctg atgaaggagg actctattct ggctgtgcga	360	
45 aaataacttcc aacggatcac tctgtatctg aaagagaaga aatacagccc gtgcgcctgg	420	
47 gagtttgtcc gagcagaaat catgcegtct ttctcttgc ctaccaactt gcaagaatct	480	
49 ttacgaagca aggaa	495	
52 <210> SEQ ID NO: 2		
53 <211> LENGTH: 27		
54 <212> TYPE: PRT		
55 <213> ORGANISM: Pseudomonas diminuta		
57 <400> SEQUENCE: 2		
59 Met Leu Arg Val Leu His Arg Ala Ala Ser Ala Leu Val Met Ala Thr		
60 1 5 10 15		
63 Val Ile Gly Leu Ala Pro Ala Val Ala Phe Ala		
64 20 25		
67 <210> SEQ ID NO: 3		
68 <211> LENGTH: 81		

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/568,337

DATE: 02/23/2006

TIME: 08:02:48

Input Set : E:\61312.us.sequences.ST25.txt

Output Set: N:\CRF4\02232006\J568337.raw

69 <212> TYPE: DNA
 70 <213> ORGANISM: Pseudomonas diminuta
 72 <400> SEQUENCE: 3
 73 atgctgagag ttctgcaccc ggcggcgtcc gccttggta tggcgactgt gatccggcctt 60
 75 gccccggccg tcgccttgc g 81
 78 <210> SEQ ID NO: 4
 79 <211> LENGTH: 81
 80 <212> TYPE: DNA
 81 <213> ORGANISM: Artificial
 83 <220> FEATURE:
 84 <223> OTHER INFORMATION: DNA encoding signal sequence of gac gene of Pseudomonas diminuta
 85 with altered codon usage
 87 <400> SEQUENCE: 4
 88 atgctgagag ttctgcaccc ggcggcgtcc gccttggta tggcgactgt gatccggcctt 60
 90 gccccggccg tcgccttgc g 81
 93 <210> SEQ ID NO: 5
 94 <211> LENGTH: 100
 95 <212> TYPE: DNA
 96 <213> ORGANISM: Pseudomonas diminuta
 98 <400> SEQUENCE: 5
 99 atcctggttc gtacgcggccg cctacaagtgt gtatctagg ggaacgttcc gggggcgtcg 60
 101 ctgcaacggc gtctccggat ctgggtgaga gggaaatcc 100
 104 <210> SEQ ID NO: 6
 105 <211> LENGTH: 209
 106 <212> TYPE: DNA
 107 <213> ORGANISM: Pseudomonas diminuta
 109 <400> SEQUENCE: 6
 110 tctagaccaa caacatcttc aacgtctacc cgaccaagat tcaggagccg tcggccgacc 60
 112 tgggcaatgg gatgtacagc gggcttgccg cgttcggctt caccggccga tcctggttcg 120
 114 tacgcgcgcg ctacaagtgg tgatctagg gaaacgttccg gggggcgtcgc tgcaacggcg 180
 116 tctccggatc tgggtgagag gggaaatcc 209
 119 <210> SEQ ID NO: 7
 120 <211> LENGTH: 23
 121 <212> TYPE: DNA
 122 <213> ORGANISM: Artificial
 124 <220> FEATURE:
 125 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 127 <400> SEQUENCE: 7
 128 taactgtcag accaagttta ctc 23
 131 <210> SEQ ID NO: 8
 132 <211> LENGTH: 20
 133 <212> TYPE: DNA
 134 <213> ORGANISM: Artificial
 136 <220> FEATURE:
 137 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 139 <400> SEQUENCE: 8
 140 gcgtttcggt gatgacggtg 20
 143 <210> SEQ ID NO: 9
 144 <211> LENGTH: 23

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/568,337

DATE: 02/23/2006

TIME: 08:02:48

Input Set : E:\61312.us.sequences.ST25.txt

Output Set: N:\CRF4\02232006\J568337.raw

145 <212> TYPE: DNA
 146 <213> ORGANISM: Artificial
 148 <220> FEATURE:
 149 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 151 <400> SEQUENCE: 9
 152 tcatgttga cagcttatca tcg 23
 155 <210> SEQ ID NO: 10
 156 <211> LENGTH: 19
 157 <212> TYPE: DNA
 158 <213> ORGANISM: Artificial
 160 <220> FEATURE:
 161 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 163 <400> SEQUENCE: 10
 164 ggtcgaggtg gccccggc 19
 167 <210> SEQ ID NO: 11
 168 <211> LENGTH: 36
 169 <212> TYPE: DNA
 170 <213> ORGANISM: Artificial
 172 <220> FEATURE:
 173 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 175 <400> SEQUENCE: 11
 176 ggggggtcta gaccaacaac atcttcaacg tctacc 36
 179 <210> SEQ ID NO: 12
 180 <211> LENGTH: 32
 181 <212> TYPE: DNA
 182 <213> ORGANISM: Artificial
 184 <220> FEATURE:
 185 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
 187 <400> SEQUENCE: 12
 188 ccccccgaat tcactagtac gcgtctctcc 32
 191 <210> SEQ ID NO: 13
 192 <211> LENGTH: 315
 193 <212> TYPE: DNA
 194 <213> ORGANISM: Artificial
 196 <220> FEATURE:
 197 <223> OTHER INFORMATION: DNA comprising part of gac gene of Pseudomonas diminuta
 199 <400> SEQUENCE: 13
 200 ggggggtcta gaccaacaac atcttcaacg tctacccgac caagattcag gagccgtcg 60
 202 ccgacctggg caatggatg tacagcgggc ttgcggcgtt cggttcacc ggccgatcct 120
 204 ggtcgtagc cgccgcctac aagtggatg ctaggaaac gttccgggg cgtcgctgca 180
 206 acggcgtctc cggatctggg tgagagggaa aatccatgtctg gagagttctg cacccggcgg 240
 208 cgtccgcctt ggttatggcg actgtgatcg gccttgcgcc cgccggagaga gacgcgtact 300
 210 agtgaattcg ggggg 315
 213 <210> SEQ ID NO: 14
 214 <211> LENGTH: 11
 215 <212> TYPE: DNA
 216 <213> ORGANISM: Artificial
 218 <220> FEATURE:
 219 <223> OTHER INFORMATION: Oligonucleotide, part of PCR primer

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/568,337

DATE: 02/23/2006
TIME: 08:02:48

Input Set : E:\61312.us.sequences.ST25.txt
Output Set: N:\CRF4\02232006\J568337.raw

```

221 <400> SEQUENCE: 14
222 tcgccttgc g
225 <210> SEQ ID NO: 15
226 <211> LENGTH: 23
227 <212> TYPE: DNA
228 <213> ORGANISM: Artificial
230 <220> FEATURE:
231 <223> OTHER INFORMATION: Oligonucleotide, PCR primer
233 <400> SEQUENCE: 15
234 ttgcggccgc ggtcgccctt gcg
237 <210> SEQ ID NO: 16
238 <211> LENGTH: 4
239 <212> TYPE: PRT
240 <213> ORGANISM: Pseudomonas diminuta
242 <400> SEQUENCE: 16
244 Val Ala Phe Ala
245 1
248 <210> SEQ ID NO: 17
249 <211> LENGTH: 540
250 <212> TYPE: DNA
251 <213> ORGANISM: Artificial
253 <220> FEATURE:
254 <223> OTHER INFORMATION: DNA comprising nucleotide sequence encoding human interferon
255 alpha 2B
257 <400> SEQUENCE: 17
258 gggggggccgc ggtcgccctt gcgtgcgatc tgccgcaaac ccacagcctg ggtagccggc 60
260 gaaccttgc gcttcggca cagatgcggc gaatctctt tttctcttc ttaaaggatc 120
262 gacatgactt cggttcccc caggaggagt tcggtaacca gttccaaag gctgaaacca 180
264 tcccggtatt gcatgagatg atccagcaga tcttcaacct gttcagcact aaggacttt 240
266 ctgctgcttg ggatgagacc ctgcttgaca aattctacac tgaactgtac cagcagctga 300
268 acgacctgga agcctgcgtg atccagggtg tgggtgtgac tgagactccg ctgatgaagg 360
270 aggactctat tctggctgtg cggaaaatact tccaacggat cactctgtat ctgaaagaga 420
272 agaaaatacag cccgtgcgcc tgggaggttg tccgagcaga aatcatgcgg tctttctt 480
274 tgtctaccaa cttgcaagaa tctttacgaa gcaaggaata atacgcgtga attcgggggg 540
277 <210> SEQ ID NO: 18
278 <211> LENGTH: 807
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial
282 <220> FEATURE:
283 <223> OTHER INFORMATION: DNA encoding fusion protein comprising signal sequence of
gac
284 gene of Pseudomonas diminuta and human interferon alpha 2B
287 <220> FEATURE:
288 <221> NAME/KEY: CDS
289 <222> LOCATION: (210)..(788)
291 <400> SEQUENCE: 18
292 tctagaccaa caacatcttc aacgtctacc cgaccaagat tcaggagccg tcggccgacc 60
294 tgggcaatgg gatgtacagc gggcttgcgc cgttcggctt caccggcgga tcctggttcg 120
296 tacgcggccgc ctacaagtgg ttagtctaggg gaacgttccg ggggcgtcgc tgcaacggcg 180
298 tctccggatc tgggtgagag gggaaatcc atg ctg aga gtt ctg cac cgg gcg 233

```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/568,337

DATE: 02/23/2006
TIME: 08:02:48

Input Set : E:\61312.us.sequences.ST25.txt
Output Set: N:\CRF4\02232006\J568337.raw

299		Met Leu Arg Val Leu His Arg Ala	
300		1 5	
302	gcc tcc gcc ttg gtt atg gcg act gtg atc ggc ctt gcg ccc gcc gtc		281
303	Ala Ser Ala Leu Val Met Ala Thr Val Ile Gly Leu Ala Pro Ala Val		
304	10 15 20		
306	gcc ttt gcg tgc gat ctg ccg caa acc cac agc ctg ggt agc cgg cga		329
307	Ala Phe Ala Cys Asp Leu Pro Gln Thr His Ser Leu Gly Ser Arg Arg		
308	25 30 35 40		
310	acc ttg atg ctt ctg gca cag atg cgg cga atc tct ctt ttc tct tgc		377
311	Thr Leu Met Leu Ala Gln Met Arg Arg Ile Ser Leu Phe Ser Cys		
312	45 50 55		
314	tta aag gat cga cat gac ttc ggt ttc ccg cag gag gag ttc ggt aac		425
315	Leu Lys Asp Arg His Asp Phe Gly Phe Pro Gln Glu Glu Phe Gly Asn		
316	60 65 70		
318	cag ttc caa aag gct gaa acc atc ccg gta ttg cat gag atg atc cag		473
319	Gln Phe Gln Lys Ala Glu Thr Ile Pro Val Leu His Glu Met Ile Gln		
320	75 80 85		
322	cag atc ttc aac ctg ttc agc act aag gac tct tct gct gct tgg gat		521
323	Gln Ile Phe Asn Leu Phe Ser Thr Lys Asp Ser Ser Ala Ala Trp Asp		
324	90 95 100		
326	gag acc ctg ctt gac aaa ttc tac act gaa ctg tac cag cag ctg aac		569
327	Glu Thr Leu Leu Asp Lys Phe Tyr Thr Glu Leu Tyr Gln Gln Leu Asn		
328	105 110 115 120		
330	gac ctg gaa gcc tgc gtg atc cag ggt gtg ggt gtg act gag act ccg		617
331	Asp Leu Glu Ala Cys Val Ile Gln Gly Val Gly Val Thr Glu Thr Pro		
332	125 130 135		
334	ctg atg aag gag gac tct att ctg gct gtg cga aaa tac ttc caa ccg		665
335	Leu Met Lys Glu Asp Ser Ile Leu Ala Val Arg Lys Tyr Phe Gln Arg		
336	140 145 150		
338	atc act ctg tat ctg aaa gag aag aaa tac agc ccg tgc gcc tgg gag		713
339	Ile Thr Leu Tyr Leu Lys Glu Lys Tyr Ser Pro Cys Ala Trp Glu		
340	155 160 165		
342	gtt gtc cga gca gaa atc atg cgg tct ttc tct ttg tct acc aac ttg		761
343	Val Val Arg Ala Glu Ile Met Arg Ser Phe Ser Leu Ser Thr Asn Leu		
344	170 175 180		
346	caa gaa tct tta cga agc aag gaa taa tacgcgtact agtgaattc		807
347	Gln Glu Ser Leu Arg Ser Lys Glu		
348	185 190		
351	<210> SEQ ID NO: 19		
352	<211> LENGTH: 192		
353	<212> TYPE: PRT		
354	<213> ORGANISM: Artificial		
356	<220> FEATURE:		
357	<223> OTHER INFORMATION: Synthetic Construct		
359	<400> SEQUENCE: 19		
361	Met Leu Arg Val Leu His Arg Ala Ala Ser Ala Leu Val Met Ala Thr		
362	1 5 10 15		
365	Val Ile Gly Leu Ala Pro Ala Val Ala Phe Ala Cys Asp Leu Pro Gln		
366	20 25 30		

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/23/2006
PATENT APPLICATION: US/10/568,337 TIME: 08:02:49

Input Set : E:\61312.us.sequences.ST25.txt
Output Set: N:\CRF4\02232006\J568337.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,4,7,8,9,10,11,12,13,14,15,17,18,19

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/568,337

DATE: 02/23/2006

TIME: 08:02:49

Input Set : E:\61312.us.sequences.ST25.txt

Output Set: N:\CRF4\02232006\J568337.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application No

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date